

Assignment 2

Station Capacity vs Usage: This graph highlights the relationship between station capacity and trip demand. It is designed to identify stations with high utilization and those underperforming. This insight helps in redistributing bikes, optimizing station capacity, and improving service efficiency.

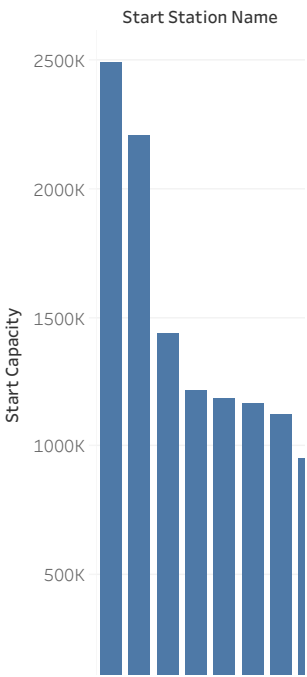
Trip Density and End Station Connectivity: The map visualizes the geographical spread of start stations and their connectivity to end stations. It helps pinpoint high-demand locations and clusters, guiding decisions about station placement and resource allocation to underserved areas.

Station Capacity vs. Average Trip Duration: This scatter plot explores the efficiency of stations by comparing capacity with average trip durations. It identifies commuter hubs with high capacity and short trips versus leisure-oriented stations with fewer trips but longer durations.

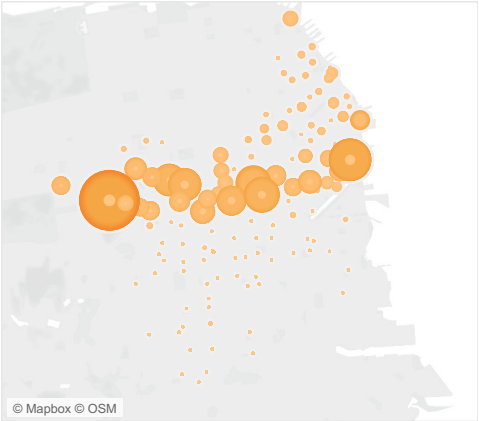
Trends in Trip Counts Over Time: This line chart showcases seasonal and monthly variations in bike usage. It highlights peaks during warmer months and differences in usage between Subscribers and Customers, offering guidance for demand forecasting and resource planning.

Average Trip Duration by Subscriber Type: This bar chart illustrates the behavioral differences between Customers and Subscribers.

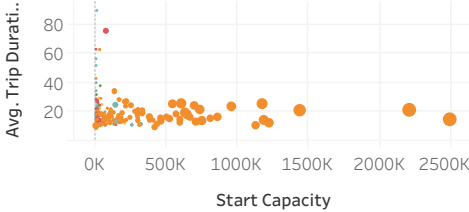
Station Capacity Vs Usage



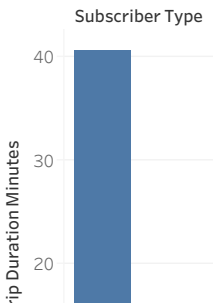
Trip Density and End Station Connectivity



Station Capacity vs. Average Trip Duration



Average Trip Duration by Subscriber Type



Regional Trip Distribution by User Type

